

**REMARKS**

Applicant would like to thank Examiner Cho for indicating that claims 11, 12, 17-24, and 26-30 are allowable and that claims 6, 8, and 16 contain allowable subject matter.

***Claim Objections***

The Patent Office objected to claim 25 because it depends upon itself. Applicant has amended claim 25 such that it depends upon claim 17. As such, the objection to claim 25 should be withdrawn.

***§ 112***

The Patent Office rejected claim 7 under 35 U.S.C. § 112, second paragraph, as being indefinite. More particularly, the Patent Office stated that there is insufficient antecedent basis for “the convolution” in claim 7. Applicant has amended claim 7 such that it now depends upon claim 3, which provides antecedent basis for “the convolution” in claim 7. As such, amended claim 7 is not indefinite and the rejection under 35 U.S.C. § 112, second paragraph, should be withdrawn.

***§ 102***

The Patent Office rejected claims 1, 2, 9, 10, and 13 under 35 U.S.C. § 102(e) as being anticipated by Kannan et al. (U.S. Patent Application Publication No. 2002/0122499). Applicant has amended claims 1 and 13 to include subject matter similar to that in allowable claim 17. More specifically, claims 1 and 13 have been amended to clarify that estimating the channel transfer function in the time domain provides a plurality of channel estimates and that these channel estimates are converted from the time domain to the frequency domain to provide transformed channels estimates. The transformed channel estimates are then used to compensate the multi-path signal in the frequency domain. As such, for at least the same reasons that claim 17 is allowable, claims 1 and 13 are also allowable.

For at least the same reasons that claim 1 is allowable, claims 2, 9, and 10 are allowable. However, Applicant reserves the right to further address the rejections of claims 2, 9, and 10 in the future if necessary.

### § 103

The Patent Office rejected claims 3-5, 7, 14, and 15 under 35 U.S.C. § 103(a) as being unpatentable over Kannan et al. (U.S. Patent Application Publication No. 2002/0122499) in view of Thomas et al. (U.S. Patent No. 6,826,240). In view of the discussion above, claims 1 and 13 are allowable. Thus, for at least the same reasons that claims 1 and 13 are allowable, claims 3-5, 7, 14, and 15 are also allowable. However, Applicant reserves the right to further address the rejections of claims 3-5, 7, 14, and 15 in the future if necessary.

### Conclusion

In view of the discussion above, claims 1-30 are allowable. Reconsideration is respectfully requested. If any issues remain, the examiner is encouraged to contact the undersigned attorney of record to expedite allowance and issue.

Respectfully submitted,

WITHROW & TERRANOVA, P.L.L.C.

By: 

Benjamin S. Withrow  
Registration No. 40,876  
P.O. Box 1287  
Cary, NC 27512  
Telephone: (919) 654-4520

Date: October 20, 2005  
Attorney Docket: 2867-251

<b>CERTIFICATE OF TRANSMISSION</b>	
I HEREBY CERTIFY THAT THIS DOCUMENT IS BEING TRANSMITTED VIA FACSIMILE ON THE DATE INDICATED BELOW TO:	
Examiner: <u>Hong Sol Cho</u>	Art Unit: <u>2662</u> Fax: <u>571-273-8300</u>
<u>Kelly Farrow</u>	Name of Sender
<u>[Signature]</u>	Signature
<u>10/20/05</u>	Date of Transmission